From wang!elf.wang.com!ucsd.edu!info-hams-relay Wed Apr 3 04:27:31 1991 remote from tosspot

Received: by tosspot (1.64/waf)

via UUCP; Wed, 03 Apr 91 07:45:46 EST

for lee

Received: from somewhere by elf.wang.com id aa09599; Wed, 3 Apr 91 4:27:30 GMT

Received: from ucsd.edu by relay1.UU.NET with SMTP

(5.61/UUNET-shadow-mx) id AA02427; Tue, 2 Apr 91 21:51:39 -0500

Received: by ucsd.edu; id AA21091

sendmail 5.64/UCSD-2.1-sun

Tue, 2 Apr 91 17:19:41 -0800 for brian

Received: by ucsd.edu; id AA21080

sendmail 5.64/UCSD-2.1-sun

Tue, 2 Apr 91 17:19:37 -0800 for /usr/lib/sendmail -oc -odb -oQ/var/spool/

lqueue -oi -finfo-hams-relay info-hams-list
Message-Id: <9104030119.AA21080@ucsd.edu>

Date: Tue, 2 Apr 91 17:19:36 PST

From: Info-Hams Mailing List and Newsgroup <info-hams-relay@ucsd.edu>

Reply-To: Info-Hams@ucsd.edu

Subject: Info-Hams Digest V91 #261

To: Info-Hams@ucsd.edu

Info-Hams Digest Tue, 2 Apr 91 Volume 91 : Issue 261

Today's Topics:

110>220 Transformers (2 msgs)

Alinco DR-590T AR-1000 scanner ATV: AM or FM

Can you really learn code from tapes?

Cheap Keyers FAQ - Part 2

Heathkit DX-40?

Licensing Philosophy? (2 msgs)

Proxim spread-sequence digital radio test report Radio installation in Honda Accord

RG8U

the Freeband below 10 meters

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu> Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu> Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text

herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there. ______ Date: 2 Apr 91 17:36:00 GMT From: sdd.hp.com!zaphod.mps.ohio-state.edu!unix.cis.pitt.edu!dsinc! netnews.upenn.edu!platypus!bill@ucsd.edu Subject: 110>220 Transformers To: info-hams@ucsd.edu In article <9103290456.AA23031@ucsd.edu>, asqj-nbf@zama-emh1.army.mil (ASQJ-NBF) writes: Most soldiers > if they bring their transformers back from Europe keep them for a while Just be careful which ones you buy. The smaller ones (approx. 3"x3"x7") cannot be run backwards. I can't draw a picture, but they consist of a single winding with 220 accross the whole thing and a tap in the middle to provide 110. Attempts to plug in the 110 winding will usually result in a rather intersting fireworks display. On the other hand, the bigger one's (2KW, 5KW) work quite well. I have been using mine since the I came back from Germany the last time (1979). bill KB3YV Bill Gunshannon If this statement wasn't here, bill@platypus.uofs.edu | This space would be left intentionally blank bill@tuatara.uofs.edu | #include <std.disclaimer.h> ______ Date: 2 Apr 91 21:25:15 GMT From: pa.dec.com!shlump.nac.dec.com!koning.enet.dec.com@decwrl.dec.com Subject: 110>220 Transformers To: info-hams@ucsd.edu 1> |>Just be careful which ones you buy. The smaller ones (approx. 3"x3"x7") |>cannot be run backwards. I can't draw a picture, but they consist of a |>single winding with 220 accross the whole thing and a tap in the middle |>to provide 110. Attempts to plug in the 110 winding will usually result |>in a rather intersting fireworks display. |>... |>bill KB3YV |> |>--

If this statement wasn't here,

|> Bill Gunshannon

That does NOT compute. What you describe is an autotransformer: such a beast works perfectly well in either "direction". (More accurately, the notion of "direction" is totally irrelevant.)

paul

Date: 2 Apr 91 19:05:15 GMT From: news-mail-gateway@ucsd.edu

Subject: Alinco DR-590T To: info-hams@ucsd.edu

I am very seriously considering the purchase of a 590 at the Rochester hamfest next month but I have some reservations that perhaps some of you who own a 590 would like to address. A friend of mine bought a 570 last year and was initially very pleased with it. Three months later it was returned to Alinco for a transmitter failure. Seems like it drew much current on transmit with no output. Several weeks later it was returned in working condition with no indication of what the problem was. It's been working fine since then until this week when the VHF portion will transmit with high power only. My question: Am I likely to encounter similar (or dissimilar) problems with a new 590? The Drake rig I have in my car now has worked perfectly for 13+ years, I don't want a rig that fails in its infancy, warranty or not. My second concern is based on the fact that the 570 has a built-in duplexer with a single antenna connector; the 590 has separate connectors. Why? Is there a problem with using a dual band antenna or did they do this to reduce cost? ANY comments, pro or con, regarding the 590 will be appreciated and considered in my decision. Tnx es 73,

Lou, K2ANC Xerox Corp. 800 Phillips Rd. Bldg. 128-53E Webster, NY 14580 (716) 422-3899

Date: 2 Apr 91 22:12:18 GMT

From: usc!cs.utexas.edu!asuvax!hrc!gtephx!dalyb@ucsd.edu

Subject: AR-1000 scanner To: info-hams@ucsd.edu

In article <1991Mar27.191159.29361@panix.uucp>, schuster@panix.uucp (Michael

```
Schuster) writes:
> 3. The horrible firmware bug which will corrupt the current memory channel
      whenever the AM/FM button is pressed in manual mode BEFORE selecting a
      frequency increment (i.e. the bank# is still displayed rather than the
>
>
      increment) is NOW CONSIDERED A =FEATURE= and is documented as such in
      the new instruction insert. Phooey.
>
This reminds me of a cartoon I saw in Byte; the caption read "Gentlemen, I say
than fix the bugs, we change the documentation and call them features." A sign
in the cartoon had the name of the company --- CLUNK Software! ;v)
Brian K. Daly WB70ML @ AG Communication Systems, Phoenix, Arizona
UUCP: {...!ames!ncar!noao!asuvax | uunet!zardoz!hrc | att}!gtephx!dalyb
Phone: (602) 582-7644 FAX: (602) 582-7111
Date: 2 Apr 91 17:17:32 GMT
From: pa.dec.com!shlump.nac.dec.com!sousa.enet.dec.com!sndpit.enet.dec.com!
smith@decwrl.dec.com
Subject: ATV: AM or FM
To: info-hams@ucsd.edu
In article <22762@unix.SRI.COM>, larson@snmp.sri.com (Alan Larson) writes...
>In article <1018@sousa.enet.dec.com> smith@sndpit.enet.dec.com (Willie Smith)
writes:
>Some of the specific advantages
>of FM include:
         Better linearity and greater average transmitted power.
>
    Truely linear amplifiers are rare in the amateur community
    in the VHF and UHF frequency range. The effective power
    of AM TV is 1/8 the carrier power.
OK, so even at small deviations (and 6 MHz bandwidths), doesn't FM win over
AM just for greater average power?
> The standard for FM ATV deviation is 4 MHz. For a broadcast quality
>signal, 4 MHz is a reasonable guess at max deviation, so the BW=2(4+4)
>which comveniently equals 16 MHz. You had the bandwidth and deviation
>mixed up, apparently.
```

Yeah, I keep doing it too. Oh, well, learning by making misteaks (:_)

works well too....
>>The quick
>>answer seems to be that nobody knows....

> I would claim that people do know. After all, the engineers who build >the commercial stuff must know. Apparently, not the folks selling the >stuff, though. It is sad to see the FM sellers so clueless.

Well, in some cases, the vendor is also the manufacturer (can you say Garage Shop?) and he may well have pulled the designs from ham publications, so maybe no-one really does know (except the denizens of this group, of course, who are educating me daily!). Thanks for the input! Sounds like I ought to get AM and FM TV rigs and compare them, eh? Anyone got a spare credit card I can use? :+}

Willie Smith
smith@sndpit.enet.dec.com
smith%sndpit.enet.dec.com@decwrl.dec.com
{Usenet!Backbone}!decwrl!sndpit.enet.dec.com!smith

Date: 2 Apr 91 20:06:35 GMT

From: swrinde!cs.utexas.edu!csc.ti.com!ti-csl!tilde.csc.ti.com!axis!

sqa.dsg.ti.com!edh@ucsd.edu

Subject: Can you really learn code from tapes?

To: info-hams@ucsd.edu

In article <8346@crash.cts.com> wlup69@pro-harvest.cts.com (Rob Heins) writes:

>Seriously though, with the new Technician Class, why waste time using code >you're never going to use.

How about if you want to use hf bands for communications world-wide?

>But nowadays, I'd be willing to bet manual CW would take a couple of hours >to set up for.

You'd lose. As an exercise at your next ARC meeting, divide the group in two, provide both groups with the same array of miscellaneous parts, wire, and tools (if you don't know the minimum set of parts to provide, contact a kindly elmer in advance). Set group A to the task of getting on the air using voice. Set group B to the task of getting on the air using morse code. See who wins; if the winning group is too fast, have them use a Novice band to slow them down to 5 wpm (they'll gripe). You can make the affair even more interesting if you don't include a soldering iron in the tools provided!

!!!Sorry, couldn't resist!!! Rob, you are entitled to your opinion, and

I myself spend most of my on-air time on vhf, and I actively encourage people to study for and take the codeless tech test. However, let's not be presumtuous about code - comments like yours are liable to flame up the code vs. no-code wars, and we really don't want that, do we? 73!!

- -

Ed Humphries Texas Instruments, Inc. 512-250-6894
N5RCK Internet ed.humphries@hub.dsg.ti.com

-. Packet N5RCK@NA4M

Date: 2 Apr 91 15:40:13 GMT

From: soleil!mlb.semi.harris.com!trantor.harris-atd.com!x102c.ess.harris.com!

blombardi@RUTGERS.EDU Subject: Cheap Keyers To: info-hams@ucsd.edu

How come everyone seems to have missed the (to me) obvious answer?

Back in the late 70's every issue of the ARRL Handbook carried a circuit called the Accu-Keyer. Designed by (and here he stretches memory about as far as it can go) WB4VVF. It used a handful of TTL chips, nothing exotic, and gave full iambic keying, dot and dash completion, and variable speed. It was my first keyer, and I built it in '76.

TTL old hat? (I can hear everyone saying 'the AZTECS had TTL' :-)) Use HCT, or straight CMOS from the 74C series.

Go to a library and look up a handbook from '76 to somewhere in the early 80's. You'll find it.

73, Bob

Bob Lombardi WB4EHS >>>>> Internet: blombardi@x102c.ess.harris.com M/S 102-4826, Harris Corp GASD, P.O. Box 94000, Melbourne, FL 32902 Hobbies: ******* on hold thanks to being a gradual student in EE ****** aspiring classical pianist. Professional: electrical engineer.

Date: 2 Apr 91 19:14:18 GMT

From: gatech!prism!mailer.cc.fsu.edu!sun13!murray@ucsd.edu

Subject: FAQ - Part 2 To: info-hams@ucsd.edu

How up-to-date is this version? I notice that wuarchive's date stamp on the file is June 28 1988. I assume (hope!) this version postdates the last big rewrite ('87?) but perhaps a word or two in the way of a caveat is in order, for the folks who don't notice this detail.

Still, it's better than nothing :-) Thanks to whoever found this.

```
>->Diana L. Syriac dls@genrad.com Ham: KC1SP (Sweet Pea) <-
--
*Standard Disclaimers Apply*| ---Get Out Of HELL Free!---
John R. Murray | The bearer of this card is entitled to forgive
murray@vsjrm.scri.fsu.edu | Himself of all Sins, Errors and Transgressions.
Supercomputer Research Inst.| -- D. Owen Rowley
```

Date: 1 Apr 91 14:54:34 GMT

From: swrinde!cs.utexas.edu!execu!sequoia!uudell!bigtex!texsun!newstop!eastapps!

boat!jkeyes@ucsd.edu
Subject: Heathkit DX-40?
To: info-hams@ucsd.edu

I picked up an old Heathkit DX-40 transmitter, circa 1959, at a hamfest yesterday. Runs on 80-40-20-15-11/10 meters. It came with an external Heathkit VF-1 VFO and a manual for the DX-40. Everything seems to work pretty well, with a 60 watt light bulb dummy load hooked up, once I learned how to tune it up.

Now I've got a few questions:

- Any general opinions, positive or negative, on this rig? Did I pay too much (\$55 including VFO)? Do you have a DX-40 and have any recommendations?
- Is there any easy way to get a sidetone out of this rig, since it appears to have no provisions for one?

- I'm mainly intersted in CW, but the DX-40 also has a phone mode. I assume this is AM only? Does anyone use AM anymore?
- Can I hook a keyer up to a rig like this, with 30V coming out the key jack?
- The VF-1 came without a manual. Can anyone tell me what the phono jack on the back of the VF-1 is for?

Thanks for the help!

John

(six weeks and counting, waiting for tech+ license)

Date: 2 Apr 91 16:37:40 GMT

From: swrinde!cs.utexas.edu!csc.ti.com!ti-csl!tilde.csc.ti.com!axis!

sqa.dsg.ti.com!edh@ucsd.edu
Subject: Licensing Philosophy?

To: info-hams@ucsd.edu

The last paragraph of Bill's message contained the answer to his question. The U.S. has a radio service that meets the requirements specified: no technical knowledge required, no code required, no license required, etc. It is called the Citizens Band.

It does not matter that state-of-the-art has progressed to the point that anyone can purchase a high-tech radio appliance that can be plugged in and operated (at least ssb, hi) into any resonably long piece of wire. That does not make someone an amateur radio operator. The technical knowledge to build and/or repair communications equipment leads to persons who can (and do) lead the U.S. in experimentation, development, and research in all manner of things electronic. That such knowledge is important can be seen easily - just talk to any engineering staffing manager who has interviewed engineering graduates who have studied design metrics and computer block/module design, but who hasn't been

prompted in that college career to actually build one of those modules they are supposed to be putting together! That same technological understanding is why amateurs perform so well in communications emergencies.

The requirements are not difficult as far as the theory portion of the written exam is concerned. It is there specifically to encourage the development of at least an interest in electronics/communications, and more generally the advancement of technology. The frequency allocations and priveleges we enjoy as amateurs exists as a direct consequence of the value the U.S. places on the development of the technology and engineering skills (and not incidently the companion ability to serve as emergency communicators). If someone wishes to take advantage of technology without understanding it, that is fine and is in no way a disparagement of that person. But that is NOT ham radio. Such individuals are free to use the C.B. (please stay OUT of 10 meters!). They can use satellite technology by simply picking up the telephone or turning on the television. Off my soapbox. 73 all.

- -

Ed Humphries N5RCK Texas Instruments, Inc. 512-250-6894 Internet ed.humphries@hub.dsg.ti.com Packet N5RCK@NA4M

Date: 2 Apr 91 19:19:35 GMT

From: sdd.hp.com!cs.utexas.edu!bcm!convex!texsun!newstop!male!zule!dlp@ucsd.edu

Subject: Licensing Philosophy?

To: info-hams@ucsd.edu

In article <12562@pt.cs.cmu.edu>, chiles@chiles.slisp.cs.cmu.edu (Bill Chiles)
writes:

- |> A friend was asking me the other day why one must learn some basic
- |> electronics to obtain a amateur radio license. I immediately thought about
- |> a body of skilled operators and technicians to push the state of the art
- |> and help out in communication emergencies, yada yada yada, and I thought
- |> about inducing self-respect and arrogance to support professional behavior
- |> on the air.

|>

- |> Then he made two more points: with the state of modern gear, one or two can
- |> fix their own rigs without a factory, and the rigs do everything. The
- > other point was that the government doesn't restrict the public's access to
- > operating motor vehicles to those who demonstrate basic mechanic's skills.
- |> That is, the government doesn't believe you need to know how carburators,
- |> exhausts, fuel injection, air conditioning, etc., work to be a responsible
- |> vehicle operator without interfering with others on the roadways. Why then
- |> must a radio operator know about the internals of his gear to obtain access
- |> to the airwaves? Let's assume there is some restriction that is valid in

|> licensing radio operation, and then I want to know if knowledge of basic
|> electronics is such a valid restriction.

|>

The only comment I would make here, is that using the state of our access to the automobile as an example as to why not to have this strigent testing in amateur radio is not the best choice of an example. Considering that 50,000 people die on our highways each year, most of them from improper operation of a vehicle, proves that you do need some hurdle before turning people loose with dangerous equipment. And the fact is that ham radio equipment is dangerous if used improperly.

Actually I'm glad the Amateur radio license required me to study some electronics. I am now kind of interested in playing with antennas and seeing what I can put together from what I can learn and my own skills. Besides, the work increases my level of respect for the hobby and encourages me to abide by the rules. I've earned something now, and I don't want to degrade it by not respecting what I've earned.

- -

Thanks

Dan Pritchett | ARPA/Internet: dlp@zule.EBay.Sun.COM Sun Federal System Engineer | UUCP: ...!sun!dlp

No one can tell what goes on between the person you were and the person you become. No one can chart that blue and lonely section of hell. There are no maps of change. You just...come out the other side. Or you don't.

--Stephen King

Date: 2 Apr 91 20:18:15 GMT

From: swrinde!zaphod.mps.ohio-state.edu!usc!snorkelwacker.mit.edu!stanford.edu!

unix!snmp.sri.com@ucsd.edu

Subject: Proxim spread-sequence digital radio test report

To: info-hams@ucsd.edu

Recently, we ran some tests with the Proxim spread-spectrum radios that have received some recent attention.

BACKGROUND

The Proxim spread-spectrum radios are designed to operate under Part 15 rules in the 902-928 MHz frequency band. They are designed for the OEM market, and are intended to be included in other products. The boards tested were an evaluation kit. Proxim has several models, with

the RXA-1000 at 1 watt. Lower power models are listed in the documentation.

Some of the claimed specifications of the RXA-1000 radios are:

Output Power 1 Watt

Sensitivity (1E-5 BER) -95 dBm (typical), -90 dBm (minimum)

Data Rate 121 Kb/s

Modulation Bandwidth

-6 dBc 1.8 MHz (typical) -40 dBc 4.2 MHz (typical)

Interface

Synchronous serial 121 Kb/s

Asynchronous Serial up to 19.2 Kbaud

MEASUREMENTS

The output power of the two radios was measured at 29 and 29.6 dBm.

The output spectrum was examined with a spectrum analyzer. The center component of the spectrum was fairly flat across a 1.5 to 1.8 MHz bandwidth, with approximately 20 dB of drop fairly sharply at the edges, rising again by about 5 dB over the next 300 - 400 kHz, then sloping back down over the next MHz. Several observers noted that it did not have a $\sin(x)/x$ shape.

The sensitivity was measured to the carrier detect (CD) indication, which the manual claims is on receiver lock to the transmitted signal. This measured sensitivity was -84 dBm. Note that this test is not as difficult as a 1E-5 BER, which would be expected to require a stronger signal.

TESTS

The radios were connected to vertical antennas with an estimated 2 - 3 dBi gain each. One antenna was placed on a rain gutter of the house, and other was on top of the car. With this arrangement, the range was a rather disappointing 2 - 3 blocks. At 4 blocks, few ICMP echo requests arrived without checksum errors.

Further tests were made at the Stanford field site, using the same antenna on the car, but using a small Yagi beam with an estimated gain of 8 dBi. The site provided terrian that allowed clear paths between elivated points. Fixed attenuators were inserted in the receiver feedline. The range was determined to be 2 miles with 12.8 dB of attenuation at the receiver.

The estimated receiver sensitivity is calculated as:

Transmitter power: 29.6 dBm transmit feedline: -3 dB transmit antenna: 2 dBi path loss -101.8 dB receive antenna: 8 dBi receive feedline: -2 dB -12.8 dB receive attenuators: signal to receiver -80 dBm

We believe that these results are fairly consistent with the measured -84 dBm signal levels for the CD (receiver lock) indication.

From these calculations, we could infer the results of other path and antenna combinations. By removing the 12.8 dB attenuators, we would expect a range of 8.7 miles, with the present equipment.

Replacing the antennas and feedline with 1 dB loss feedline (such as 20 feet of Belden 9913) and 6 dBi antennas would provide an extra 4 dB of margin, increasing the expected range to 13.8 miles.

TEST CONDITIONS

As is common in field testing, we discovered some interesting connector problems. One of the computers used was a Macintosh 512KE, which has DB-9 connectors for the serial output jacks. The cable with it connected it to a DB-25 connector, but the radios had the DIN-8 connectors used on newer Macintoshes. Mike Chepponis produced some jumpers to correct this problem by using wire-wrap wire, and wrapping the ends of the jumpers around the pins on the cable with a pair of small needle-nosed pliers.

Meanwhile, on the roof, Paul Flaherty was attempting to keep from being blown off the roof by the wind while he mounted the antenna, when he discovered that the 1/2 inch heliax that we were using to connect the radio to the antenna had a UHF (like a PL259) connector at one end. After some hunting, an appropriate pair of adaptors was found to connect to the antenna which had a more reasonable N connector.

Fortunately, the wind partially let up shortly after the rain started soaking those working outside about halfway through the actual testing.

Meanwhile, Dewayne and I were warm and relatively comfortable in the car, with a Macintosh and radio in the back seat running from an inverter and transmitting ICMP Echo requests. The antenna was on a mag-mount near the center of the car roof.

CREDITS

I would like to thank:

- -- John Glissman (N6RPN) for his assistance in the lab measurements of spectrum, power, and sensitivity.
- -- Paul Flaherty (N9FZX), Dewayne Hendricks (WA8DZP), and Mike Chepponis (K3MC), for assistance in field testing in the rain.
- -- Dewayne Hendricks (again), for providing the radios tested.

Alan Larson WA6AZP

Date: 28 Mar 91 04:39:35 GMT

From: atha!aunro!aupair.cs.athabascau.ca!lyndon@decwrl.dec.com

Subject: Radio installation in Honda Accord

To: info-hams@ucsd.edu

dhp1@gte.com (Dave Pascoe) writes:

>It looks like there is a nice space just under the AM/FM stereo. The >problem is that there is a plastic frame-like insert piece there which >is where I think the optional equalizer would go. Has anyone ever removed >one of these inserts? I tried quickly the other day with no luck. It looks >like it should be possible, though.

Mine doesn't have this (it's an 81). What I did was mount the VHF rig to the right side of the gear shift housing. This probably won't work if you have an automatic. The HF rig (TS-680) also bolts to the shift housing. It fits in the space below the radio with about .5 inches to spare.

>The other thing is DC power.....has anyone been able to find an unused >grommet that penetrates the firewall? I'd like to run +12V right from the >battery or fuse block to the radio....using the old cigarette lighter trick >right now.

I found one on the passenger side firewall ...

- -

Lyndon Nerenberg VE6BBM / Computing Services / Athabasca University atha!cs.athabascau.ca!lyndon || lyndon@cs.athabascau.ca Packet: ve6bbm@ve6bbm.ab.can.noam

The only thing open about OSF is their mouth. --Chuck Musciano

Date: 2 Apr 91 21:11:22 GMT

From: usc!cs.utexas.edu!convex!texsun!newstop!jethro!caliban.Sun.COM!

tjonz@ucsd.edu Subject: RG8U

To: info-hams@ucsd.edu

Did anyone manage to work Belden, RG8U, during his DXpedition to the Coaxial Islands on April 1?

Todd, KB6JXT

Date: 2 Apr 91 12:59:13 GMT

From: usc!snorkelwacker.mit.edu!bloom-beacon!eru!kth.se!sunic!mcsun!ukc!axion!

vision!mgc!dave@ucsd.edu

Subject: the Freeband below 10 meters

To: info-hams@ucsd.edu

In article <z65f9vg@rpi.edu> glickman@aix01.aix.rpi.edu (Joel H Glickman) writes: >I think that what is happening between 28.000 and 28.100 is truly >disgusting, but what can we do about it??

One way we solved a local problem (a local enthusiastic "skip talker" whose enthusiasm extended all the way up to 28.5 on occasions) was like this:

- 1 Find him (not difficult he was never off :-)
- 2 Talk to him even buy him a beer.
- 3 Note small (3 day) lull in activity (beer must have been good :-)
- 4 Note resumption of previous activities.
- 5 Talk to him again receive response involving sex and travel.
- 6 Visit his home at around 3am and carefully insert a steel dressmaking pin through his coax (ensuring braid and centre were shorted); clip off the visible ends of the pin.
- 7 Note 5 day lull in activity.
- 8 Drive past his QTH and notice coax replacement taking place.
- 9 Note resumption of activities almost exclusively above 28.0.
- 10 Another visit, another pin.

[Loop from 7 thru ten a few times]

Final: Ad in local paper advertising CB gear for sale; never heard on 10m since.

Whilst I'm not condoning the approach adopted, I have to smile at its effectiveness...

_ _

Dave Lockwood

Head of Technology .	!uunet!mcsun!ukc!vision!mgc!dave
MG Computer Systems Ltd, PO Bo	x 50, Doncaster, DN4 5AW +44-302-738770
End of Info-Hams Digest	
